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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,046	02/05/2004	Philip R. Houston	BUSI-P01-001	5450
28120	7590	12/03/2010	EXAMINER	
ROPS & GRAY LLP IPRM - Floor 43 PRUDENTIAL TOWER 800 BOYLSTON STREET BOSTON, MA 02199-3600				MCCORMICK, GABRIELLE A
ART UNIT		PAPER NUMBER		
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			12/03/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/773,046	HOUSTON, PHILIP R.
	<b>Examiner</b>	<b>Art Unit</b>
	Gabrielle McCormick	3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 November 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Status of Claims***

1. This action is in reply to the amendment filed on November 9, 2010.
2. Claims 1, 6, 8, 16 and 18-19 have been amended.
3. Claims 1-19 are currently pending and have been examined.

### ***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 9, 2010 has been entered.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
6. Based upon consideration of all of the relevant factors with respect to the claim as a whole, claim 1 is held to claim an abstract idea, and is therefore rejected as ineligible subject matter under 35 U.S.C. 101. The following is the rationale for this finding:
7. Firstly, no transformation is recited. The behaviors are merely data points that are either clustered or not. The data points do not undergo a change in state or thing.
8. Secondly, the recitation of a machine is only tangentially related to the performance of the steps. The executing of a detection process that analyzes a record with a processor to detect *possible deceptive behaviors* is understood as basically a data gathering step for the heart of the invention, which is drawn to the review (by a human user) of the detected behaviors to determine

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the presence of a cluster. To support this, the Examiner notes that the record is annotated (by the human user) to indicate the presence of the cluster, not to indicate a possible deceptive behavior as detected by the processor. Further, Applicant argues patentability based upon the clustering methodology, therefore, the Applicant asserts that the clustering perform by the human user is the heart of the invention which is not tied to a particular machine.

10. Dependent claims 2-5, 7-12 and 18 when analyzed as a whole are held to be ineligible subject matter and are rejected under 35 U.S.C. 101 because the additional recited limitations fail to establish that the claims are not directed to an abstract idea. The additional limitations merely involve further cluster identification activities that are performed by the human user.

### ***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
12. Claims 1, 6 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
13. Claims 1 and 6 recite “the detected behaviors”. It is unclear whether these are the same or different behaviors from the “possible deceptive behaviors”. The “detected behaviors” are reviewed to determine a cluster of “deceptive behaviors”, thus one would understand that the behaviors reviewed are deceptive behaviors, not “possible deceptive behaviors”.
14. Claim 18 recites “the additional behaviors”. It is unclear whether these are the same or different behaviors from the “additional *possible* deceptive behaviors”. The “additional behaviors” are reviewed to determine a cluster of “deceptive behaviors”, thus one would understand that the behaviors reviewed are deceptive behaviors, not “possible deceptive behaviors”.
15. Applicant’s amendments to claims 1 and 6 overcome the previous rejection under 112, first paragraph. The rejection is withdrawn.

### ***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 1-10 and 12-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Al Bandar et al. (US Pub. No. 2004/0181145, hereinafter referred to as "Al Bandar") in view of Greenfield ("It's Illegal to Lie to Stockholders, but Not to Employees; [Metro Final Edition]", The Sacramento Bee. Sacramento, Calif.: Jul 6, 1998, pg. B.5).

18. **Claims 1 and 12:** Al Bandar discloses

- Receiving a record of a disclosure; (P[0112] and P[0114])
- Executing a detection process that analyzes the record with a processor to detect possible deceptive behaviors; (P[0022-0026]: analysis is performed automatically using a machine; P[0029]: channels are coded by behavior; P[0034]: channels are analyzed to determine deceptive behavior);
- Reviewing the record to determine the presence of a cluster of deceptive behaviors responsive to a stimulus; (P[0022-0026]: analysis is performed automatically using a machine; P[0029]: channels are coded by behavior; P[0034]: channels are analyzed to determine deceptive behavior; P[0067]: channel data is grouped (i.e., a cluster is determined) to make a decision about behavioral states.
- Annotating the record to indicate the presence of a cluster including a reference to each type of deceptive behavior, wherein the types of behaviors are retrieved from a database; (P[0013]: frames are coded manually and P[0009]: coding comprises a record of whether a particular behavior took place and opinion of the judge; P[0011]: patterns are detected that indicate behavioral state; P[0024-0025]: automatic coding, therefore the database retrieval is inherent)

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19. The Examiner notes that the content of the annotation is **nonfunctional descriptive data** and is not functionally involved in the steps recited. **The annotation of the record would be performed regardless of the descriptive content of the annotation.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
20. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included annotations that includes the type of behavior, the numbers of behaviors within a cluster of behavior, the stimulus, subject of the stimulus and the reply because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of annotation data does not patentably distinguish the claimed invention.
21. Al Bandar does not disclose a corporate disclosure.
22. Greenfield, however, discloses that federal law requires honesty with regard to communications with shareholders (pg. 1; para. 4) and if the corporation misrepresents itself, investors are entitled to sue (pg. 2; para. 5).
23. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included corporate communications, as disclosed by Greenfield in the system disclosed by Al Bandar, for the motivation of providing a method of determining truthfulness of corporate executives during the course of a law suit.
24. The Examiner notes that the type and content of disclosure is **nonfunctional descriptive data** and are not functionally involved in the steps recited. **The detection of deception behavior would be performed regardless of the nature of the disclosure analyzed.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
25. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included corporate disclosures because such data does not functionally relate

to the steps in the method claimed and because the subjective interpretation of a type of data analyzed does not patentably distinguish the claimed invention.

**26. Claims 2-5:** Al Bandar discloses questions posed and subdividing the disclosure into time periods (P[0095]) and reviewing the record for pre-determined non-verbal responses (P[0057]).

**27. Claims 6, 13 and 16:** Al Bandar discloses

- A record of a disclosure on a display; (P[0112] and P[0114])
- A processor for analyzing the record to determine the presence of a cluster of deceptive behaviors responsive to a stimulus; (P[0022-0026]: analysis is performed automatically using a machine; P[0029]: channels are coded by behavior; P[0034]: channels are analyzed to determine deceptive behavior; P[0067]: channel data is grouped (i.e., a cluster is determined) to make a decision about behavioral states.
- An annotator for allowing a reviewer to indicate the presence of a cluster wherein the types of behaviors are retrieved from a database; (P[0013]: frames are coded manually and P[0009]: coding comprises a record of whether a particular behavior took place and opinion of the judge; P[0011]: patterns are detected that indicate behavioral state; P[0024-0025]: automatic coding, therefore the database retrieval is inherent)

**28. NOTE:** The manner in which the system (i.e., the recorder, processor and annotator) are to be utilized (i.e., to generate a first or second record of a corporate disclosure by a representative and to allow a review to indicate first or second clusters, references of clusters, numbers of deceptive behaviors, the stimulus, subject of the stimulus and reply) are not germane to the issue of patentability of the system itself.

**29.** The Examiner notes that the content of the annotation is **nonfunctional descriptive data** and is not functionally involved in the steps recited. **The annotation of the record would be performed regardless of the descriptive content of the annotation.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

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30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included annotations that includes the type of behavior, the numbers of behaviors within a cluster of behavior, the stimulus, subject of the stimulus and the reply because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of annotation data does not patentably distinguish the claimed invention.
31. AI Bandar does not disclose a corporate disclosure.
32. Greenfield, however, discloses that federal law requires honesty with regard to communications with shareholders (pg. 1; para. 4) and if the corporation misrepresents itself, investors are entitled to sue (pg. 2; para. 5).
33. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included corporate communications, as disclosed by Greenfield in the system disclosed by AI Bandar, for the motivation of providing a method of determining truthfulness of corporate executives during the course of a law suit.
34. The Examiner notes that the type and content of disclosure is **nonfunctional descriptive data** and are not functionally involved in the steps recited. **The detection of deception behavior would be performed regardless of the nature of the disclosure analyzed.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included corporate disclosures because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of a type of data analyzed does not patentably distinguish the claimed invention.
36. **Claim 7:** AI Bandar discloses a pre-determined period of time (P[0064]) and collecting data the time that relates to the specific answer to a question (i.e., time after the stimulus ends) (P[0095]) but does not disclose 5 seconds.

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37. Though AI Bandar does not disclose approximately 5 seconds, this difference is only found in the **nonfunctional descriptive data** and is not functionally involved in the steps recited. **The review of the behavior (i.e., data collection) would be performed regardless of length of the time period.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
38. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included five seconds because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the length of the time interval does not patentably distinguish the claimed invention.
39. **Claim 8:** AI Bandar detecting a deceptive behavior that is excluded from the cluster of deceptive behaviors. (P[0139]: vectors between answers are ignored; thus behaviors that occurred during gaps between answers are excluded from the cluster that relates to preceding answer. See also P[0091-0092] where the system can differentiate between behaviors that relate to an eye blink and a person looking down. Thus a cluster of behaviors relating to eye blinking do not include behaviors relating to looking down.).
40. **Claims 9 and 10:** AI Bandar discloses clusters of the same behaviors (P[0087]: group data for one channel (i.e., one behavior) and different behaviors (P[0098]: a vector is produced that represents all channel statistics)).
41. **Claims 14 and 15:** AI Bandar discloses questions posed and answers (i.e. statement made). (P[0095]).
42. **Claims 11 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over AI Bandar et al. (US Pub. No. 2004/0181145, hereinafter referred to as "AI Bandar") in view of Greenfield ("It's Illegal to Lie to Stockholders, but Not to Employees; [Metro Final Edition]", The Sacramento Bee. Sacramento, Calif.: Jul 6, 1998, pg. B.5) in view of Johnson, JR. (US Pub. No. 2002/0062089, hereinafter referred to as "Johnson").

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43. **Claims 11 and 17:** AI Bandar does not disclose indicating a likelihood of deception based on the number of deceptive behaviors in a cluster.
44. Johnson, however, discloses computing a ranges of scores based on the number of markers for indicating probable deception, probable truth and indeterminate. (P[0092]).
45. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included indicating a likelihood of deception based on the number of behaviors, as disclosed by Johnson, in the system of AI Bandar for the motivation of correlating the behavior data to a summary indicator of deception to allow quick identification of a subject's responses with regard to overall deception.
46. **Claims 18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over AI Bandar et al. (US Pub. No. 2004/0181145, hereinafter referred to as "AI Bandar") in view of Greenfield ("It's Illegal to Lie to Stockholders, but Not to Employees; [Metro Final Edition]", The Sacramento Bee. Sacramento, Calif.: Jul 6, 1998, pg. B.5) in view of Gevins et al. (2003/0013981, hereinafter referred to as "Gevins").
47. **Claims 18 and 19:** AI Bandar discloses obtaining a second disclosure (P[0110-0111]). It is obvious that the reviewing and annotating, as discussed above with respect to claims 1 and 6 would be performed for the second disclosure. AI Bandar does not explicitly disclose performing a comparison of the two records.
48. Gevins, however, at P[0015-0016] discloses using an individual's own prior baseline data to measure subtle changes in the individuals functioning over time.
49. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included comparing two records of an individual to identify behaviors as disclosed by Gevins, in the system of AI Bandar for the motivation of measuring subtle changes with respect to the individual over time. (Gevins; P[0015]).

### ***Response to Arguments***

Applicant argues that patentability of claims 1 and 6 lie in the particular behaviors that are clustered. The Examiner contends that the only positively claimed limitation regarding the cluster is to review the behaviors to determine the presence of a cluster. No step is recited where a cluster is identified that positively claims the various behaviors. To positively claim in such a way, Applicant can recite "identifying a cluster that includes (behavior A), (behavior B) and not (behavior C)".

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabrielle McCormick whose telephone number is (571) 270-1828. The examiner can normally be reached on Monday - Thursday (5:30 - 4:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jamisue Plucinski can be reached on (571) 272-6811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gabrielle McCormick/  
Examiner, Art Unit 3629